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GIANT RETROPERITONEAL TERATOMA IN AN ADULT FEMALE WITH ABDOMINAL DISTENSION: A CASE REPORT

Radio-Diagnosis

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ABSTRACT

A teratoma is a true neoplasm that comprises of tissues developing from 2 or more germ cell layers. Here we present a case report of 36 years old female patient presenting with progressive abdominal swelling and severe pain in right-half of abdomen predominantly in upper part. Clinical examination revealed a mass in epigastrium extending to umbilical region. Radiological imaging revealed a large, well encapsulated, heterogenous mass in right retroperitoneal region showing fat components with few incomplete septations, calcification and solid component without hemorrhage. She underwent exploratory laparotomy which confirmed the radiological findings. Histopathological findings were suggestive of mature teratoma.

KEYWORDS

Abdominal mass, retroperitoneal teratoma, tumor.

INTRODUCTION

Primary mature teratomas are rare non-seminomatous germ cell tumor [2][3][4] [5]. The most common sites include gonads (testes & ovaries) [1][4][6], followed by extragonadal tissues [15%], among them retroperitoneum is the least common site [8]. Retroperitoneal teratomas account for only 4% of all primary teratoma in adults [9]. comprises only 1-11% of [2][4][9] retroperitoneal neoplasms (10-20% cases occur beyond 30 years) [2].

Case Report

A 36 years old female presented in outpatient department.

Chief complaints: Severe abdominal pain with abdominal distension.

History of Present Illness:

She had similar pain 15 years ago, retroperitoneal mass was found, too small to be operated; hence follow-up was suggested. She had no apparent complaints since. She had no complaints of fever, loss of appetite or weight.

Clinical Examination:

A large, immobile, firm mass extending from epigastrium to hypogastrium, percussion-dull.

Laboratory results: Dyslipidemia & diabetes.

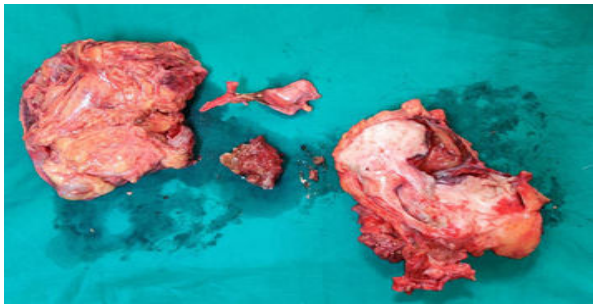
USG- A retroperitoneal cystic mass with hair, iso- hyperechoic soft tissue, central calcification.

CT scan-

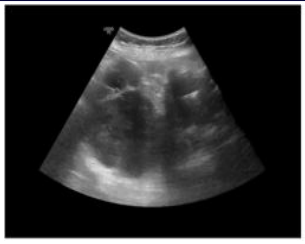
Well-defined retroperitoneal SOL (229mmX113mmx 139mm); low attenuation areas (HU -25 to -30). Components- cystic (non-enhancing); soft tissue-enhancing; calcification, compressing Gall-Bladder, under-surface of Liver (Right Lobe), no obvious infiltration. It was pushing small-bowel anteriorly; abutting IVC, Aorta. Pancreas-thinned out with lipomatosis, pushed towards left.

MRI- Well-defined retroperitoneal SOL

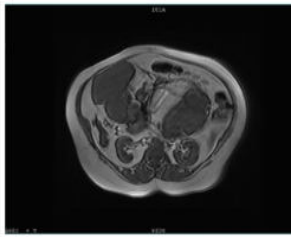
Fat - T1, T2-hyperintense, signal dropout in fat-suppressed imaging.
Cystic component- T1-hypointense, T2-hyperintense.
Calcification- T1, T2-hypointense, GRE-blooming.
Soft tissue component-T1-isointense, T2-hyperintense.



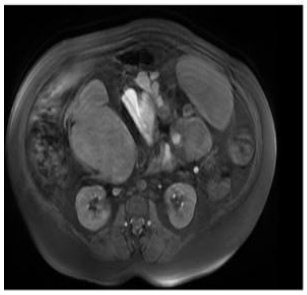
Gross specimen



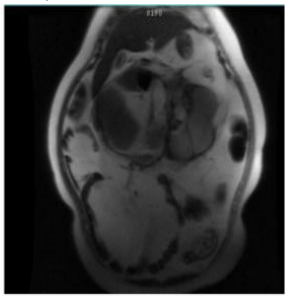
USG – whole-abdomen



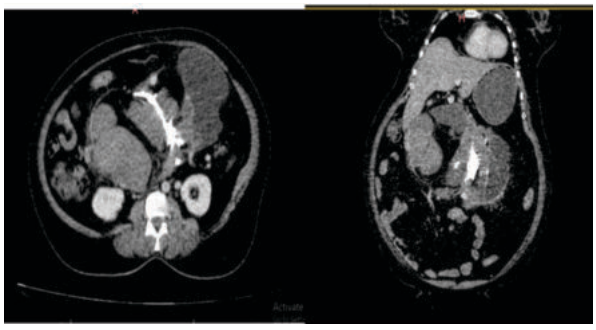
MRI, T1WI-axial



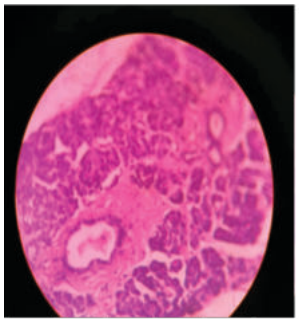
MRI T1WI,Fat-suppressed-Axial



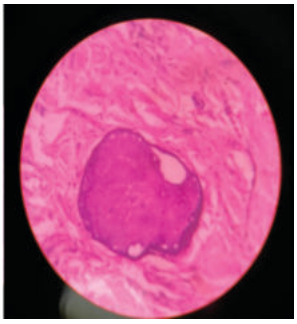
MRI T1WI-Coronal



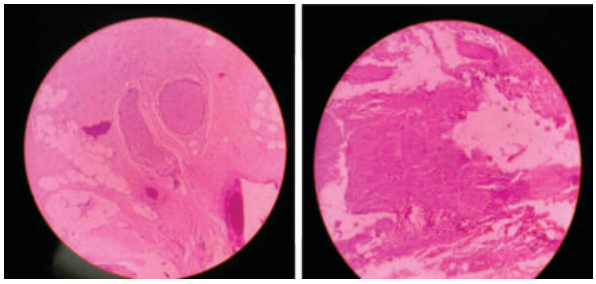
CECT-scan-Axial, Coronal



Salivary Gland



Cartilage



Squamous-cells **Smooth-muscle**

CT-scan, MRI findings were suggestive of Retroperitoneal teratoma. She underwent exploratory-laparotomy through midline-laparotomy incision, revealing a large firm solid cystic retroperitoneal-mass occupying most of the abdomen that was excised completely. On cutting the specimen yellowish-white material with soft-tissue and fatty tissues were found suggesting dermoid.

DISCUSSION-

Retroperitoneal teratoma comprises 0.2-0.8% of all tumors [1]. Most of these are secondary specially in males, coming from testes [8] Teratomas are classified as one of four variants: 1) Mature (containing differentiated tissue); 2) Immature (containing undifferentiated tissue)[2]; 3) Teratoma with malignant-transformation (1-2%)[13]; 4) Monodermal-when arising from one germ-cell layer [8]. Teratomas are usually asymptomatic; can cause pain, abdominal distension, nausea, vomiting by compressing surrounding structures [3]or by torsion [3]. Diagnosis can be done by radiological-imaging. It can be predominantly cystic or solid. USG, Computed tomography [CT] scan or magnetic resonance imaging [MRI] can identify various components of these tumors, gives precise location, morphology of the tumor, and its relation with adjacent structures, which provide better preoperative planning and increased likelihood of complete removal of the tumor with less iatrogenic damage. Surgical resection is the mainstay of treatment [8][14].

CONCLUSION

Primary retroperitoneal teratoma is a rare entity in adults.. Preoperatively, the diagnosis can be established by its characteristic appearance on CT and MRI. Surgical resection is the mainstay of treatment.

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